

REMARKS

Claim Rejections

Claims 1, 6 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Frost et al. (U.S. 6,581,186) in view of Hwang (U.S. 5,604,687). Claims 2, 3, 4, 8, 9 and 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Frost et al., in view of Hwang, and further in view of Lasance (Thirteenth Annual IEEE Semiconductor Thermal Measurement and Management Symposium). Claims 5 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Drawings

It is noted that the Examiner has accepted the drawings as originally filed with this application.

New Claims

By this Amendment, Applicant has amended claims 1-11 and has added new claims 12-20 to this application. It is believed that the new claims specifically set forth each element of Applicant's invention in full compliance with 35 U.S.C. § 112, and define subject matter that is patentably distinguishable over the cited prior art, taken individually or in combination.

The Examiner has indicated that claims 5 and 11 would be allowed if rewritten in independent form. Applicant's new independent claim 12 comprises a combination of original claims 1 and 5, thus redrafting claim 5 in independent form. New claims 13-15 are commensurate in scope with amended claims 2-4 and each depend from new independent claim 12. Applicant's new independent claim 16 comprises a combination of original claims 6 and 11, thus redrafting claim 11 in independent form. New claims 17-20 are commensurate in scope with amended claims 7-10 and depend from new independent claim 16. In the absence of any art cited against Applicant's original claim 5 or 11, it is not believed that any detailed discussion of the cited prior art references is necessary, as to claims 12-20. Suffice

Suffice to say that claims 12-20 in this patent application contain subject matter against which no prior art citations have been made.

The primary reference to Frost et al. discloses methods and systems for providing logic cores from third party logic core providers including logic core provider (10), a logic core generator (12), a plurality of users (20, 22, 24), and logic core providers (14, 16, 18).

On page 3 of the outstanding Office Action, the Examiner admits that Frost et al. "does not disclose exchanging thermal or packaging information via a network". Additionally, the Examiner admits, page 4 of the outstanding Office Action, that Frost et al. does not teach "thermal data that include Θ_{ja} , Ψ_{jt} , and Θ_{jc} , as defined in the claims of their disclosures".

Frost et al. discloses a method (column 2 lines 33-41) wherein information is received, with a computer, from one or more logic core providers. The information pertains to one or more logic cores that are available from the logic core providers. The information is in a format that cannot be used by the logic core generator. The information is processed with the computer to provide the information in a format that can be used by the logic core generator to generate logic cores. Frost et al. involves one or more logic core providers rather than one user.

In another embodiment, the method comprises defining a graphical user interface (GUI) that is configured to interface with third party logic core providers. The GUI collects information pertaining to one or more logic cores that are provided by the third party logic core providers. The collected information is then rendered into a form that is useable by the logic core generator for generating one or more logic cores. Therefore, Frost et al. involves at least a third party.

By contrast, in the present Application, a far-end user can get the thermal data simulation report through a network to an internet thermal data analysis system. The present Application has one internet thermal data analysis system rather than many users.

The secondary reference to Hwang et al. discloses a thermal analysis system for analyzing a thermal model of an object. In Hwang et al., the thermal model is analogous to an electronic circuit (column 2 lines 47-50). The resist network thermal model of an object is analyzed by a Gauss-Seidel iteration analysis. The Gauss-

Seidel processor uses an acceleration factor and performs a plurality of temperature for a plurality of nodes in the resist network thermal model into a second set of data defining a second plurality of temperature for the plurality of nodes.

Hwang et al. does not teach a user end interface to retrieve requests of package parameters from a far-end user requesting thermal package analysis via a network. The Examiner admits, page 4 of the outstanding Office Action, that Hwang et al. does not teach "thermal data that include Θ_{ja} , Ψ_{jt} , and Θ_{jc} , as defined in the claims of their disclosures".

The secondary reference to Lasance discusses different methods used in the thermal characterization of electronic parts.

Lasance does not teach a user end interface to retrieve requests of package parameters from the far-end user requesting thermal package analysis via a network; a storage media; a job database containing several job forms and providing at least one of said job forms for the far-end user to input said package parameters; a thermal analysis module containing at least one application software to analyze said package parameters; a package parameter database having package related data stored therein; a process unit access package parameters, said package related data and executing said application software, so as to generate a thermal data simulation report based on said package data; and a file transfer software responsive to thermal data simulation report and forward said thermal data simulation to said far-end user.

Even if the teachings of Frost et al., Hwang et al., and Lasance were combined, as suggested by the Examiner, the resultant combination does not suggest a user end interface to retrieve requests of package parameters from the far-end user requesting thermal package analysis via a network.

It is a basic principle of U.S. patent law that it is improper to arbitrarily pick and choose prior art patents and combine selected portions of the selected patents on the basis of Applicant's disclosure to create a hypothetical combination which allegedly renders a claim obvious, unless there is some direction in the selected prior art patents to combine the selected teachings in a manner so as to negate the patentability of the claimed subject matter. This principle was enunciated over 40 years ago by the Court of Customs and Patent Appeals in In re Rothermel and

Waddell, 125 USPQ 328 (CCPA 1960) wherein the court stated, at page 331:

The examiner and the board in rejecting the appealed claims did so by what appears to us to be a piecemeal reconstruction of the prior art patents in the light of appellants' disclosure. ... It is easy now to attribute to this prior art the knowledge which was first made available by appellants and then to assume that it would have been obvious to one having the ordinary skill in the art to make these suggested reconstructions. While such a reconstruction of the art may be an alluring way to rationalize a rejection of the claims, it is not the type of rejection which the statute authorizes.

The same conclusion was later reached by the Court of Appeals for the Federal Circuit in Orthopedic Equipment Company Inc. v. United States, 217 USPQ 193 (Fed.Cir. 1983). In that decision, the court stated, at page 199:

As has been previously explained, the available art shows each of the elements of the claims in suit. Armed with this information, would it then be non-obvious to this person of ordinary skill in the art to coordinate these elements in the same manner as the claims in suit? The difficulty which attaches to all honest attempts to answer this question can be attributed to the strong temptation to rely on hindsight while undertaking this evaluation. It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning quarterbacking is quite improper when resolving the question of non-obviousness in a court of law.

In In re Geiger, 2 USPQ2d, 1276 (Fed.Cir. 1987) the court stated, at page 1278:

We agree with appellant that the PTO has failed to establish a *prima facie* case of obviousness. Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.

Applicant submits that there is not the slightest suggestion in either Frost et al., Hwang et al., or Lasance that their respective teachings may be combined as suggested by the Examiner. Case law is clear that, absent any such teaching or suggestion in the prior art, such a combination cannot be made under 35 U.S.C. § 103.

Neither Frost et al., Hwang et al., nor Lasance disclose, or suggest a modification of their specifically disclosed structures that would lead one having ordinary skill in the art to arrive at Applicant's claimed structure. Applicant hereby respectfully submits that no combination of the cited prior art renders obvious Applicant's claims 1-11.

Summary

In view of the foregoing amendments and remarks, Applicant submits that this application is now in condition for allowance and such action is respectfully requested. Should any points remain in issue, which the Examiner feels could best be resolved by either a personal or a telephone interview, it is urged that Applicant's local attorney be contacted at the exchange listed below.

Respectfully submitted,

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